# Report of the Ten-Year Review Committee
# for the
# Department of Technical Communication

29 December 2006

## 0. Executive Summary

Technical communications is a high-quality department that has accomplished much despite limited resources (in both space and faculty positions). It is a well-recognized leader in its field – spearheading a major shift towards empirical research in the TC field. It is well-served by its unique position in the College of Engineering and serves the College very well in imparting communication skills to future engineers. Overall, the morale throughout the Department is at a very high level with the entire community strongly motivated and excited to be working within the discipline. All the degree programs in the department are performing well and should without question be continued. The Department has been particularly successful in engaging industry in all its activities from teaching and mentoring to funding research. It has also done very well in positioning its students in TC employment in the region.

However, the department is at a major crossroads. To truly capitalize on its accomplishments and unique position in its field, it will require renewed investment and/or a realignment that will give it larger presence and visibility both within the University and in the larger research community. The faculty is quite small and needs help in covering its current workload. Its Technical Japanese program, although of very high quality, is very fragile and should be better connected to other cross-cultural and globalization efforts on campus. It needs a unified and better quality space that will allow it not only to attract more and stronger students but also to create better bonds between the students and faculty. Finally, the department should be considered an important element of any initiatives in the direction of human-computer interaction (or more generally, human-technology interaction) that may be embarked upon at the University of Washington. This is a particularly important point in time with the impending transition to a new chair for the department.

There were two major concerns expressed in the previous review: lack of departmental mission statement and concerns over the department's alignment in the College of Engineering. We found that both of these concerns have been adequately addressed by the current leadership of the department both in writing and operationally. However, these issues need continued attention. The department's position in the University, as well as in the larger space of intellectual pursuits, needs to be always clearly articulated.

This report is organized into 4 major sections: (1) a brief description of the review process, (2) the review committee's major findings, (3) the major issues of concern for the future that were discovered during our discussions, and (4) some opportunities the committee feels the University could exploit at this time.

Our committee had no difficulties whatsoever in reaching the consensus opinion expressed in this report.

## 1. Review Process

This committee was appointed by a charge letter dated 25 October 2006 from the Vice Provost and Dean Suzanne Ortega and Associate Dean Melissa Austin of the Graduate School. The charge letter is attached to this report. We were charged specifically to review the programs offered by the Department of Technical Communication in the College of Engineering at the University of Washington and recommend whether or not each of them should be continued. More generally, we were tasked to determine the "health" of the department and offer advice on how it can be improved going forward and suggest investments from the University that may be needed to realize these improvements.

All the members of the committee (except one – Mason) originally met on 20 October – some via phone conference (after reviewing an initial draft of the charge letter). That meeting included the Dean of the College of Engineering, Matt O'Donnell and Associate Dean Melissa Austin of the Graduate School as well as Executive Vice Provost Ana Mari Cauce representing the Provost's Office and Associate Dean John

Sahr representing the Office of Undergraduate Education. Prior to the site visit, a subset of the committee (the on-campus members) also met privately with Prof. Judy Ramey, the chair of Technical Communication and Dean O'Donnell.

The site visit was held 15-17 November and began with an introductory dinner the evening of 15 November followed by a day and a half of meetings with faculty, staff, graduate students, and undergraduate students. The meeting ended on 17 November with a summary of this report delivered to Executive Provost Cauce, Vice Provost and Dean Ortega, Associate Dean Austin, and Dean O'Donnell with Prof. Ramey, Chair of the Department of Technical Communication present for part of that meeting. A complete agenda of the site visit is attached.

We believe the review was quite successful and the committee was well-supported by the staff of the Graduate School and the full cooperation of the entire community of the Department of Technical Communication.

## 2. Findings

**Finding #1: TC offers a solid collection of degree programs.**

*In general, all of the Technical Communication degree programs appear to be healthy and thriving. We wholeheartedly endorse the continuation of all current programs.*

Undergraduate degree: The majority of undergraduates in the TC program took the time to meet with our committee. They were a diverse group of intelligent and enthusiastic students. They were confident that their TC degree would serve them well throughout their careers and found the faculty to be excellent. Undergraduates from the TC program often get multiple job offers upon graduation and have ample intern opportunities while in school. The decline in undergraduate enrollment, given the strength of the degree, is of concern but is consistent with a national trend in undergraduate technical communication programs. The recruiting efforts of the department will likely improve the enrollment and should be continued. The committee has some concerns, however, that recruiting undergraduates into the program may be difficult because many technically oriented undergraduates lack the maturity to see the value of a technical communication education. Recruiting at the Master's level, where the message is much more likely to be well received, may be more effective.

Master's degree: The Master's program in technical communication is excellent. We met with many students in both the day and night program and found them to be intelligent, engaging, and very supportive of the program. These students understand well the benefits of the TC degree as most are either currently working or had recently left professional positions to study in the TC program. Career placement of Master's students appears to be excellent. Some of the Master's students commented that they were particularly attracted to this TC program because of its home in the College of Engineering. The Master's students also embraced their service teaching obligations. They felt the teaching grounded them in their discipline and enhanced their communication skills. Increasing enrollment in the TC program by recruiting Master's students has a lot of potential. Enrollment may be further enhanced by development of distance learning opportunities.

Doctoral degree: This degree is too new to be completely assessed but it appears to be very promising (TC will grant its first PhD degree in Spring of 2007). We met with almost all the doctoral students and found them to be enthusiastic and of high quality. The PhD students, like their Master's and Undergraduate counterparts, are confident in the value of their degree and very supportive of the faculty and program. Many of the PhD students received earlier degrees from the program and returned to UW because of their previous experience working with the TC faculty. Some concerns around the PhD were raised by the committee. These included doctoral students instructing peers, which is discussed more thoroughly below, and lack of funded projects for some of the PhD students. Some doctoral students have to do a lot of teaching and lack support for their dissertation research. A moderate teaching requirement is healthy for doctoral students, but at some point it will make it difficult to for students to do the intense research necessary for a high quality dissertation. Lack of general support for their projects hinders the research and may make it difficult to attend conferences and symposia that are critical for career development.

**Finding #2: TC is a "hidden gem" of a program.**

*The TC field is of increasing importance and UW is fortunate to have the only graduate TC program on the West Coast. Moreover, it occupies an important niche in the larger picture by virtue of being in a College of Engineering (unusual for TC programs nationally) and this home is important both to CoE and to TC. The department operates at an entrepreneurial level unmatched by other TC programs. It has high morale at all levels and among all its constituent groups (students – graduate and undergraduate, staff, and faculty). It is uniquely positioned in Puget Sound to serve a growing industry both for placement of heavily recruited students and in attracting industry-experienced instruction.*

The UW program in Technical Communication is a major player in a field of exceptional promise that is growing. (According to *Money* magazine, for example, "Technical Writer" is 13 on the list of the Top 50 Jobs in the US with an average salary of $57,841 and with a 10-year expected job growth of 23.22% (http://money.cnn.com/magazines/moneymag/bestjobs/snapshots/13.html.) More and more organizations are recognizing the contribution of technical communication to their efficiency and prosperity, and more and more academic institutions are developing undergraduate programs to train technical communicators and graduate programs to train managers, teachers, and scholars of technical communication (e.g., a single Ph.D. program in 1979 versus 38 in 2006).

The UW program has little of the visibility on the campus or the vigorous support from administrators that might be expected for one of the leading programs in this thriving field. It is virtually a buried treasure, relegated to windowless offices and classrooms in a basement without adequate financial support or sufficient tenure-line faculty. It is the only graduate program in Technical Communication on the West Coast, uniquely positioned in Puget Sound among major industry players (e.g., Microsoft, Adobe, Google, Boeing) with superior jobs for heavily recruited students as well as exciting opportunities for instruction, research, and internships. No other program in the field, graduate or undergraduate, has such extraordinary advantage in its geographical location.

In addition, none of UW's competitors at the graduate level is located in a College of Engineering: a distinction that benefits the department, the college, and the field. The department benefits by its access to empirical research opportunities in multiple engineering fields and the opportunity of its graduate students to teach technical communication, the college benefits by the availability of highly skilled instructors for its students in verbal and visual communication, and the field of technical communication benefits by the contributions of scholars doing state-of-the-art empirical research instead of the textual and interpretive studies characteristic of programs located in departments or colleges of the humanities. The UW program is truly the exemplar for the field in the entrepreneurial initiative and the ability of its faculty to win competitive grants. It also houses a key journal of the field, *Technical Communication Quarterly*, published by the Association of Teachers of Technical Writing.

The UW program's record of success in funded research and publication as well as the extraordinarily high morale of the faculty, staff, and students of the department is all the more noteworthy given the impoverished condition of its facilities. Faculty, staff, and students are all proud of their achievements, proud of their association with the College of Engineering, proud of their degrees, and proud of each other. A spirit of community and collegiality is visible, audible, and palpable.

**Finding #3: The department is well-positioned at the future of the field.**

*Emphasizing the empirical aspects of the discipline (including human-computer interaction, user-centered design, usability, and ethnographic studies), TC is well-positioned at the future of its discipline. In fact, it is the leading program in this new direction and will be an important partner in any initiatives UW is likely to make in the HCI field. It is translating this research focus by involving students at all levels in research projects.*

The UW TC department is a forward-looking program that is particularly well-positioned at the future of the technical communications and user research fields. In a competitive academic environment where most TC programs continue to have a limited focus on the core rhetorical aspects of technical communication (such as editing, writing, and instructional design) the UW program stands alone in having already integrated a user-centered approach into their programs at all levels (Undergraduate, Masters, and Ph.D.). The UW TC program retains its strong and necessary focus on the core while emphasizing the empirical aspects of the discipline – HCI, usability, user-centered research, and communication design with results focused on the actual users of the information rather than on the information itself. We saw evidence of this in the faculty research, and also in the student projects, and even in the undergraduate's ability to

articulate the importance of this line of inquiry. The teaching staff of the UW TC program have another role as ambassadors of this methodology to other engineering students through their service courses.

In industry, a user-centered approach represents the difference between the engineering (product architecture and feature set) within a product and the customer scenarios that are important when using the product. Due to competition in the marketplace it is increasingly important to focus less on what engineering makes possible and much more on the usefulness, usability, satisfaction, and in many cases, on the sheer delight of the customer or end user of the product. One need only point to the recent success of the Apple iPod or the top-to-bottom redesign of the Microsoft Windows operating system in Windows Vista to gain some insight into how important customer-centered design has become. User-centered research and the changes in communication design, that is, the results of using a customer-centric approach, are essential in shifting this paradigm.

When those of us working in industry look for writers, editors, user researchers, and others to communicate the value of products, we now look for those who can design usability tests and build and interpret data and ethnographic information about customers rather than those who merely describe the engineering wizardry behind software features. The focus the UW TC department has on usability, user-centered research and user-focused communication design is solidly within this direction. In a competitive industry like software, where staying one step ahead of the competition is essential, having graduates like those from the UW Department of Technical Communication already trained in user-centered design is important as it puts us one step ahead of the competition.

More traditional TC programs prepare students by helping them build strong technical and communication skills but largely ignore the empirical aspects of the discipline. These students are well prepared to communicate and describe product architecture, features and etc. but lack the research or data-mining skills to be considered "cutting edge" when competing for jobs with others.

As part of the evaluation process, the review committee saw demonstrations of current faculty and student research projects that use this user-centered design approach. For example, in eye tracking research where empirical data is collected to determine how a user tracks information on a web page. The data is then used to influence web page design decisions, as well as how to present information to maximize the experience of the user. We saw it also in ethnographic studies being conducted on cell phone users in the developing world where new cultural contexts for using cell phones and the importance of designing communications and usage scenarios for this emerging set of users were being analyzed

**Finding #4: TC has an important service mission.**

*TC has an important service mission to the College of Engineering that is widely recognized as being critical to programs' ABET accreditation. However, the importance of service goes in the other direction as well as the service courses serve to ground TC graduate students in the fundamentals of the discipline by connecting them to students in engineering programs.*

Good writing and speaking skills are more important than ever for engineers and other professionals. TC 231, TC 333, and to a less extent TC 509 provide an invaluable service to the College of Engineering and other units in the University, in developing writing and speaking skills. These courses appear to be well-run and very well organized. The course coordinator competently trains and manages the large number of graduate students teaching these classes. Initial concerns about graduate students teaching these classes were eased when we met with the students and discovered how important it was to their education. Further, the undergraduates benefit from the large number of graduate student instructors who are (or have been) working professionals and who can testify to the importance of communication skills in the workplace. The efforts by the TC program to link their service courses with specific program courses should continue and be strengthened. Linking the TC classes with the students' technical course work will enhance the education in both arenas and stress that communication is an essential part of the technical career. The TC support offered by the Writing Center and departmental seminars are also beneficial and should continue.

There is some concern that the entire service program hinges on the faculty coordinator. The TC department has been able to find outstanding people to fill this role but it is troublesome for such a vital function for the College to hinge on one individual. Involvement of other TC faculty in the service teaching could provide important backup.

## 3. Issues of Concern

**Concern #1: The Department is severely hampered by resource limits.**

As stated above, Technical Communication is a "buried treasure" in the basement of Loew Hall. If windowless offices for faculty, staff, and graduate students weren't enough of a handicap in self-image and recruiting ability, the department is further handicapped by having space distributed in several buildings. This hampers bonding not only between faculty and students but also among the graduate students themselves. In fact, at least one student explained that they continue a part-time job that is intellectually distinct from their studies just so they can have an adequate office on campus. Many students described the difficulties of being reassigned space or losing it altogether if they move from being teaching assistants to research assistants.

New space for the department has been identified in Sieg Hall. Although still of lesser quality than many of their peers, this will be a major improvement. We sincerely hope that the University administration is giving this potential move high priority in its planning. In addition, we would like to recommend that TC be given an *entire floor* in Sieg Hall so that it can build an identity and attitude for itself that can only come when there is a home that they can fully control.

The size of the faculty is also barely enough to meet teaching commitments. The department relies on a full-time coordinator for its service courses and utilizes graduate students almost exclusively to teach the numerous sections. The lack of direct faculty involvement in these courses is a concern as it separates the service enterprise from the mainstream of the department. However, under the circumstances, it is difficult to see where the teaching cycles would come from. This pressure is also felt at the graduate level where some graduate courses are taught by other graduate students (we expand on this particular issue below).

The instructional facilities available to the department are woefully below standards. Instructors are teaching communication skills with presentations by students having to be conducted on overhead projectors – this is not a situation that motivates the use of multi-media or even simple presentation software that is today's norm. This is an embarrassing state of affairs and does not require major expenditures to address.

Lastly, the department's technical infrastructure needs, in terms of information technology, require more attention. The department is too small to finance its own support staff but does have the need to install and maintain specialized equipment (e.g., the usability laboratory's eye-tracking hardware and software). The College needs to provide not only central support for these activities but also ensure that there are prioritized technical support resources available to the department and a clear escalation procedure.

**Concern #2: TC could be eclipsed by growth and investment in other programs nationally.**

UW's program in Technical Communication could easily be the Google or Microsoft of the field, the undisputed leader; instead, given its frail resources, it must share this leadership with RPI, Carnegie Mellon, Minnesota, Iowa State, Texas Tech, Michigan State, and a growing number of new programs at institutions of lesser reputation. Without better support, it could easily lose its shared leadership position in this competitive field and find itself eclipsed by institutions of lesser reputation but greater resources.

Compare, for example, UW's facilities with Texas Tech's:

- Five computer classrooms (4 PC and 1 Mac), each with ceiling-mounted computer projectors. Computers line the circumference of the room (allowing instructors to stand anywhere in the room and view each student's monitor) with a seminar table in the center of the room so that students may move back and forth readily from group discussion to individual work stations).
- State-of the art usability testing facility with one-way mirror, green/blue screens, and separate room for observation and recording/editing of analog or digital video.
- Student lounge
- Spacious faculty conference room
- Classes limited to 20 students

Many of these shortcomings can be addressed at relatively low cost to the University and should be considered in any move of the department to new space.

**Concern #3: Graduate teaching load is leading to graduate students teaching courses to peers.**

Because of the low number of tenure-line faculty in UW's program, the department has needed to hire adjunct faculty from local industry to teach courses in its graduate program. While this extensive use of adjunct faculty brings experience and diversity to the classroom, it may also push the limits of accreditation requirements and undermine the value of the PhD degree as an academic credential. Obviously, a heavy reliance on adjunct faculty also does little to relieve the growing service duties of tenure-line faculty in a Ph.D. program or advance the scholarly reputation of the program because adjunct faculty never direct dissertations and are less likely to publish in academic journals, participate in academic associations, or deliver presentations at academic meetings.

While it might be permissible to have instructors with a master's degree and extensive industry experience teach a graduate course for master's students in the night program, it is less desirable to have instructors with a master's degree and extensive industry experience teach a course for PhD. students. And it is certainly undesirable to have PhD students in the UW program teach a graduate course for other PhD students in the UW program: that is, some graduate students have discovered that their instructor in one course is their fellow student in another course—a situation that is at least surprising, if not altogether disturbing.

The use of adjunct faculty and especially PhD students in the teaching of graduate courses also makes the UW program in technical communication less competitive nationally. The program at Texas Tech, for example, promises its students that all graduate courses in technical communication are taught exclusively by its 15 published tenure-line faculty with PhDs.

**Concern #4: The Department's intellectual domain needs to better distinguished.**

As a service unit providing writing instruction to engineering and other technical disciplines, TC's early role and mission were clearly identified and delineated. Over time, as the department saw the need for a better understanding of technical communication through media other than text, TC has expanded its role and is seeking a redefined mission that encompasses responses to these opportunities. As a part of this enlarged mission, TC faculty see themselves as "designing communication" artifacts and processes, not simply providing writing instruction to other disciplines. With the implementation of a PhD program, the department has developed research efforts consistent with this expanded mission. As the Internet and other computer and communications technologies have enabled the world to become more interconnected, the need for evaluating alternative approaches to communication issues has become more pronounced. Moreover, cross-cultural issues are an important element in design as well as use. The department has responded to these new challenges. Much of the research can be encompassed by the widely accepted term "human computer interaction," or "HCI". Faculty members and graduate students currently have projects that are directed toward improved design of computer interfaces, techniques for evaluating alternative designs, and understanding the cultural aspects of human-technology interface designs.

The challenge is for TC to create a vision and identify a mission that clearly distinguishes its intellectual contribution to a problem space in which many other disciplines are contributing. The playing field, particularly in HCI, is crowded, especially at the University of Washington. In addition to TC's colleagues in Computer Science and Engineering, colleagues in Digital Arts and the Information School have a considerable array of HCI research projects and programs. TC's intellectual foundations (from rhetoric) do not provide a compelling means of discerning its research perspective and approach from, for example, the Information School, which draws from the information science perspective, or the Digital Arts, which draws from the intersection of digital technologies and art.

Without a clear articulation of the distinctive intellectual contribution of TC's perspective and approach, the department will have difficulty defining its scholarly boundaries in a university environment whose primary governance and power structure remain delineated by academic disciplines. There is not a shortage of problems or issues to address—the issues within the field of HCI grow as technologies and applications change. However, the realities of power and politics within an established university structure mean that a clear enunciation of TC's unique intellectual perspective would benefit the department.

**Concern #5: The discipline's image at UW needs to be improved.**

TC has a self-image as an underdog while the field as a whole has moved beyond this stage in industry. The UW TC department is a nationally recognized program that is doing progressive and innovative

research. The students who graduate and/or get certificates are competitively sought after by a variety of industry and academic programs. The department has had a strong impact and influence within their field. The faculty is passionate and capable. However, the review committee felt that the UW TC's long-term underdog position within the Department of Engineering has had an overall negative impact on the faculty in the department. We saw evidence of this in the meeting with faculty where an undercurrent of disenfranchisement and lack of entitlement resulted at times in some members of the faculty assuming an unnecessarily defensive position vis-à-vis on-going support for their work.

Although it is easy to see why the department has assumed this attitude over time, progressive change is needed. The self-image as underdog needs to be adjusted as it is getting in the way of the faculty's focus, their ability to truly become champions of their important research, their potential for growth, their impact on industry, and their overall ability for relationship building within their peer departments and generally within the university. It is time for the department as a whole to take a seat at the table with the assumption that they are fully enfranchised members of the Engineering and related communities at the UWA. This would be consistent with similar adjustments being made on engineering teams within industry where the importance and influence of user-centered design and communication is now seen as critical to the success of many engineering projects.

It is important to note that we saw this underdog mentality less in the recently hired faculty and not at all in the students so the general feeling of the review committee was that this concern would not be that difficult to address.

The difficulty of recruiting undergraduates. The UW TC department has a difficult time recruiting undergraduates. This is not surprising given that the average profile for an individual interested in this line of inquiry is that of someone who has been working in industry for some time. Generally they are exposed to the technical communications field through work. It is difficult for the average undergraduate student with no work exposure to grasp the long-term value of this field. The review committee felt that the TC department would need to be consistently innovative in any approach to recruiting undergraduates. There might be potential for recruiting from some areas of the University previously overlooked (such as Arts and Sciences) but that generally the work of recruiting undergraduates was going to continue to be an uphill battle. It is possible that the business model for the UW TC program needs to adjust to take advantage of the much stronger opportunities for recruiting Masters Candidates and Evening and certificate program recruits into consideration in favor of recruiting strategies for undergraduates.

Quality of instructional facilities. The difficulties of working in a sub-par physical space have been noted earlier in this report. It is also worth noting, however that the general quality of the instructional facilities on campus available to the UW TC program is also lacking. Data projectors, PCs, and other basic instructional materials were visibly lacking from the classrooms available for teaching undergraduates. The review committee learned of classrooms where old style overhead projectors and transparencies were being used to instruct students as well as for student presentations. For example, we learned that students were building Powerpoint presentations that were then being transferred by hand to sheets of transparency film so that they could give their presentations to the group. This seemed critically out of step with a field of inquiry dependent upon computers, data projectors, and software to do their basic work.

Awards and recognition for students. The committee noted that a stronger program of awards and recognition for students could be put in place that would add to the quality of the student experience as well as provide students with the ability to build strong and competitive resumes. Exceptional students should be recognized for their research, teaching, and other work and also have the ability to see the relative strength of their work relative to their peers. It would be useful for the UW TC Department to evaluate and leverage awards programs that are available within other Engineering and/or other programs at the UW. It also might be fruitful to evaluate awards programs that are in place in other academic programs outside UW so that the UW TC Department can ensure they remain competitive.

**Concern #6: Student funding and assignment of office space needs to be more predictable.**

Student funding is also of concern. Although the department is more entrepreneurial than most or all of its peers, many of the graduate students are not funded by research grants in the areas of research. Most of those students funded are funded through their employers or as teaching assistants or instructors for the service courses offered by the department. These additional duties required for financial support will most certainly ensure longer times to PhD that will also hurt the department's recruiting ability for the best

graduate students. It is important to devise mechanisms by which the department can offer incoming graduate students a financial package that guarantees support for some number of years (3 is typical) and increases its grant-getting ability to demonstrate its commitment to support students throughout their time in the PhD program. This issue is closely tied to office space and sense of camaraderie (see above).

**Concern #7: The Technical Japanese is very fragile.**

The program in Technical Japanese has extremely high morale with very satisfied graduates and current students. It is an intensive two-year program essentially taught by two faculty in the department. Between them, they offer 6 courses per year. It is a very fragile arrangement with extreme risks to the departure, even on a temporary sabbatical, of either instructor. The program is sustained from a small endowment that is barely keeping up with costs. Something must be done to make the program more robust and better institutionalize into the department and/or the University as a whole.

**Concern #8: A strategy for chair succession must be developed.**

Dr. Ramey has been a superb chair for the department through a rare combination of high administrative competence and intellectual leadership. It will be difficult to find a successor that will be able to take the department to the next level. It is crucial that this issue be given special attention and innovative solutions considered. For example, it may be possible for the department to recruit a stronger leader than otherwise possible if it can offer a role in a larger University effort in which TC would be an important partner (see below).

## 4. Opportunities

**Opportunity #1: Technical Japanese is a shining example of a global initiative.**

The Technical Japanese program should be held up as a major success story and leveraged by the University. The existence of a Technical Japanese question begs the question: why not Technical Chinese? More broadly, one could consider architecting similar programs along more broad cultural, as well as linguistic, lines as may be more appropriate for developing regions such as South Asia. The University should consider how it can emulate and/or integrate Technical Japanese into a more general initiative in globalization issues. This effort should be much broader than just the College of Engineering, much less the Department of Technical Communication. Technical Japanese is a “hidden gem” within a “hidden gem”.

**Opportunity #2: Global public health and humanitarian relief initiatives should be pursued.**

The committee noted that in recent years the UW TC department has begun to attract candidates with a strong interest in public health and/or humanitarian relief. We felt there was a strong opportunity for the UW TC to grow in this direction. Potential synergistic relationships within the extended UW community, for example, might include the School of Public Health where organizations like the Center for Health, Education, and Research (CHER) have focus areas in health communication, international programs with a focus on health communication, as well as regional programs in curriculum development, multi-media production, and creation of innovative health education media.

Just as the software industry emerged regionally 15 years ago as an opportunity area for technical communication, the phenomenal regional strength of the Bill & Melinda Gates Foundation has recently transformed Seattle into an international powerhouse for work being done in areas of Global Development, Global Health, and the Charitable Sector. There are potential opportunities for the UW TC Department to become actively engaged in this important arena.

**Opportunity #3: TC can be linked to other units at UW much better than it is today.**

The committee perceived two major opportunities for the department. *Linkages* to other units represent one such opportunity, and *joint research activities* provide another opportunity.

The committee believed that the department could improve two linkages that currently exist. The first is greater coordination for service offerings for engineering majors, enabling instructors in the service courses to work more closely with instructors in the engineering majors. Such coordination could, for example,

enable the timing and focus of writing assignments to be especially relevant to particular engineering class assignments.

The second linkage opportunity is that of working with other university units in the preparation of joint proposals for funding and in conducting joint research projects. Although this opportunity for joint efforts exists (and has been recognized) for units outside the College of Engineering, a set of opportunities also can be envisioned within the College, with TC working with other engineering departments on topics that could benefit from multiple perspectives.

**Opportunity #4: Draw more and better students into UW TC programs.**

As previously stated, the committee noted that the UW TC department has a difficult time recruiting undergraduate students but that strong opportunities potentially exist for expansion of the MS programs to attract students from the regional software, biotech, aeronautics, and global health industries. This would require improved and consistent marketing efforts to ensure more potential students are aware of these programs at the UW. There are potential opportunities in expanding class offerings to the Eastside or the Redmond area where a strong population of employees in the tech industry work and reside.

**Opportunity #5: Develop distance programs, even if still regional.**

Also a promising opportunity is the creation of distance education courses in the graduate-level night program to accommodate a wider population of potential students (both in geographical location and diversity). That is, instead of putting their time and energy in getting to and from on-site classrooms, graduate students could participate in online courses in synchronous and asynchronous discussions. Such courses could be designed as on-site/on-line hybrids or entirely online: either would make graduate education more accessible, convenient, and economical for students in the region. Note also that 63% percent of distance-education students are first generation (versus 42% of on-site students) according to the National Survey of Student Engagement, "Engaged Learning: Fostering Success for All Students" (http://www.nsse.iub.edu); the impact on the diversity of the graduate student population could thus be considerable. It might be fruitful for the UW TC Department to evaluate distance learning programs that are in place at other Universities so that the UW TC can understand the existing landscape and the feasibility of beginning such a program at UW.

**Opportunity #6: Professional exchanges should be encouraged.**

Professional exchanges are seen as opportunities for renewal of idea flows and a dynamic exchange of concepts that normally occur when there is high growth or turnover of faculty. With a relatively stable faculty size and composition, the department could benefit from experimentation with faculty exchanges (concurrent sabbaticals, for example, with selected institutions). Exchanges with professionals (faculty spending time in a practitioner environment and practitioners spending time with the faculty on campus) are also seen as opportunities that can be explored.

**Opportunity #7: Integrate TC into CoE development efforts.**

The College of Engineering can make much better use of Technical Communication's reputation in its development efforts. While it is natural for the College to focus on its traditional engineering disciplines, the TC field's growing recognition in many technology areas (especially information technology) coupled with the Department's strong reputation with regional and national industry, clearly indicate that TC should be touted in development efforts along side the more traditional fields. It is an opportunity that shouldn't be passed up.

**Opportunity #8: TC must be a key part of any new UW initiative in the HCI area.**

UW's Department of Technical Communication is among the leaders in the empirically-driven part of the TC field. Human-computer interaction, communication design, user-centered design, and usability testing are terms heard as often as "technical communications" in discussions with the Department's community. The department is clearly moving, and for many good reasons, into a space crowded with other players at UW including Computer Science & Engineering, the Information School, Department of Communication, Digital Arts (DxArts), and Industrial Design in the School of Art. This fact necessitates discussion of what role TC could play in any new initiatives at UW in the space of human-computer interaction research.

Clearly, it must be an important partner with these other units. It has much to bring to the table and much to gain from being part of a larger vision.


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